IN THE CLAIMS:

1-7. (Canceled)

8. (Currently Amended) A method comprising:

providing a dried hydrophobic sol-gel on a solid support structure, wherein said dried hydrophobic sol-gel and said solid support structure are functionalized with at least one arsenic-removing constituent comprising a manganese and iron mixture;

contacting said dried hydrophobic sol-gel on a solid support structure to an aqueous sample; and

analyzing said dried hydrophobic sol-gel on said solid support structure after contacting it with said aqueous sample in order to the detect the presence and/or concentration of arsenic.

9. (Canceled)

10. (Original) The method recited in claim 8, wherein said dried hydrophobic sol-gel is a hydrophobic aerogel or hydrophobic xerogel.

11. (Canceled)

12. (Original) The method recited in claim 8, wherein the solid support structure is granulated activated carbon (GAC).

13. (Original) The method recited in claim 12, wherein the GAC is acid washed.

14. (Canceled)